

DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS P.O. BOX 60267 NEW ORLEANS, LOUISIANA 70160-0267

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Planning, Programs, and Project Management Division Environmental Planning and Compliance Branch

CLEAN WATER ACT, SECTION 404 RIVERS AND HARBORS ACT, SECTION 10 PUBLIC NOTICE

GREATER NEW ORLEANS HURRICANE AND STORM DAMAGE RISK REDUCTION SYSTEM PROJECT LAKE PONTCHARTRAIN AND VICINITY LAKEFRONT TO MICHOUD CANAL ORLEANS PARISH, LOUISIANA INDIVIDUAL ENVIRONMENTAL REPORT NEW ORLEANS EAST IER #7

<u>Introduction</u>. This Public Notice is issued in accordance with provisions of Title 33 CFR Parts 336.1(b)(1) and 337.1, which establish policy, practices, and procedures to be followed on Federal actions involving the disposal of dredged or fill material into waters of the United States.

Project Authority. Reducing the level of risk in the New Orleans area was authorized mainly under the Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act of 2006 (3rd Supplemental – Public Law [P.L.] 109-148, Chapter 3, Construction, and Flood Control and Coastal Emergencies); the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery of 2006 (4th Supplemental - P.L. 109-234, Title II, Chapter 3, Construction, and Flood Control and Coastal Emergencies); and the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007 House of Representatives 2206 (pg. 41-44) Title IV, Chapter 3, Flood Control and Coastal Emergencies, (5th Supplemental), General Provisions, Sec. 4302.

Location. The proposed action is located in New Orleans, Orleans Parish, Louisiana.

Project Description. The proposed action is a component of the Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS) and consists of realigning portions or reconstructing all levees, floodwalls and floodgates to a grade that would achieve the 100-year level of risk reduction for the New Orleans metropolitan area. The project is divided into three segments. Lake Pontchartrain and Vicinity (LPV) 109 includes a 39,500 linear foot section of levee located between Lake Pontchartrain and CSX Railroad. LPV 110 consists of a floodgate and supporting floodwalls where the CSX Railroad crosses the levee, approximately 1 mile north of the Gulf Intracoastal Waterway (GIWW). LPV 111 is 28,069 feet long and extends from the CSX Railroad gate (LPV 110) south to the GIWW and then southwest along the north bank of the GIWW to a point just east of Michoud Canal where it ties into Michoud Canal Floodwall (Figure 1).



Figure 1: Project Area for LPV 108, 109, 110, and 111; New Orleans East Lakefront to Michoud Canal (IER #7)

PREVIOUSLY AUTHORIZED ACTION

The placement of foreshore protection was previously described in the Final Environmental Impact Statement (EIS) for the LPV Hurricane Protection Project, dated August 1974. Because the previously authorized elevations for LPV 108 levee and foreshore protection also provide the 100-year level of risk reduction, no additional improvements beyond those previously authorized are required.

LPV 108

The existing levee is currently at the 100-year level of risk reduction and therefore no additional levee work is required. Riprap foreshore protection along Lake Pontchartrain would be restored to the previously authorized elevation (which is equal to or greater than the 100-year level of risk reduction) to reduce erosion and wave impact on the LPV 108 levee. Approximately 121,000 cubic yards of riprap would be required to raise levee foreshore protection to an elevation that would not settle below a net grade of approximately +9 feet NAVD 88 in 10 years.

It is anticipated that riprap would be transported to the Lake Pontchartrain shoreline by barge and placed from equipment stationed on barges in the lake and from trucks and equipment accessing foreshore protection from the shoreline. The current proposal for placement of foreshore protection would be located within a 48-foot wide right-of-way located along the shoreline of Lake Pontchartrain. The original foreshore protection as addressed in the EIS was placed within a larger 60-foot wide right-of-way. The current plan would permanently fill approximately 7.2 acres of Lake Pontchartrain.

To provide barge access, channels would be dredged in Lake Pontchartrain perpendicular to the shoreline and laterally to perpendicular channels. It is proposed that five offshore to inshore access channels perpendicular to the Lake Pontchartrain shoreline and four lateral channels parallel to the shoreline would be constructed to allow the tug boat and barge to approach the construction area (see Figure 3). Perpendicular and lateral channel dimensions would be approximately 10 feet deep, 100 feet wide at the channel bottom with a 2:1 slope on both channel sides. Perpendicular channels would range from 764 to 1,126 feet long and parallel channels would be 2,000 feet long. The dredging operation would excavate approximately 243,000 cubic yards of material. Dredged material (tailings) would be placed within a 178-foot wide area located on one side of and parallel to the dredged channel. The channel width and dredged material placement area would create a 400-foot wide footprint, which includes the 140-foot wide channel (top width; 100 foot wide bottom), the 178-foot wide dredged material stock pile and the space between the stock pile and channel. Assuming these dimensions, the channel and excavated sediments are expected to temporarily impact approximately 118.1 acres of lakebed. After construction activities have been completed, dredged material from the access channels would be used to backfill the dredged channels.

Re-dredging of the five access channels and side-casting of dredged material would temporarily impact 118.1 acres of lake bottom. The placement of riprap for foreshore protection would permanently fill 7.2 acres of lake bottom with 121,000 cubic yards of riprap, all of which is in a shallow water environment that is suitable for supporting SAV. Any remaining riprap would be placed on top of the existing foreshore protection.

PROPOSED ACTION AS ADDRESSED IN IER #7

LPV 109

The LPV 109 reach includes the use of stability berms, high strength geotextile and prefabricated vertical (PV) drains (i.e., wick drains) for levee construction. A stability berm with a width of 120 feet would be constructed on the protected side from South Point to U.S. Highway 90 (US 90) and a stability berm with a width of 175 feet on the protected side would be constructed from US 90 to LPV 110. Two to three layers of high strength geotextile would be used with the levee fill being placed in five lifts between South Point and US 90 and in six lifts between US 90 and LPV 110. PV drains would be used to promote horizontal drainage in subsurface clay soils. Additionally seepage analysis would be performed during levee design, and if additional seepage control measures are warranted, a cement-bentonite (CB) slurry wall would be constructed beneath the levee. The levee would be raised to an elevation that would vary with distance from Lake Pontchartrain and would not settle below a net grade of between +17.0 feet NAVD 88 (from South Point to US 90) and +22.0 feet NAVD 88 (from US 90 to the CSX Railroad floodgate) in 10 years. Flood side levee slopes would be 1 vertical (V) on 4 horizontal (H) from South Point to US 90 and 1 V on 5 H from US 90 to LPV 110. Protected side levee slopes would be 1 V on 4 H. The levee would be vegetated along both slopes along its entire length following construction. The levee crest could be up to 10 feet wide and would have a granular road base from South Point to I-10.

Risk reduction measures for three highway crossings (Interstate 10 [I-10], US 90 and U.S. Highway 11[US 11]) are incorporated into the proposed design for LPV 109. The US 90 and US 11 crossings would each incorporate the construction of a new floodgate supported on both sides by a T-wall that transitions into the LPV 109 levee. The height of the US 11 floodgate and T-wall would be +18.5 feet NAVD 88 and the height of the US 90 floodgate and T-wall would be +22.0 feet NAVD 88. The I-10 crossing includes raising the existing levee structure and highway earthen ramp to the 100-year level of risk reduction, with a minimum net elevation of +19.0 feet NAVD 88. There would be sufficient overbuild in the crossing to accommodate natural compaction and subsidence in order to maintain the 100-year level of risk reduction for 10 years. The construction of the ramp occurs within existing Louisiana Department of Transportation and Development (DOTD) right-of-way.

The LPV 109 proposed action would fill forested wetlands and intermediate marsh on the protected side of the levee and forested wetland, intermediate marsh and brackish marsh on the flood side of the levee. Wetland fill would occur as a result of an expanded levee footprint associated with the increase in levee height. The total area of wetlands impacted by the LPV 109 proposed action is 337.3 acres. Of that total, 236.3 acres of wetlands would be permanently impacted on the protected side and 101.0 acres would be permanently impacted on the flood side of the LPV 109 levee.

LPV 110

The existing CSX Railroad floodgate and associated T-wall at LPV 110 would be raised to an elevation that would not settle below a net grade of approximately +30 feet NAVD 88 in 10 years. The proposed work would include the replacement of the gate monolith and adjacent T-walls and I-walls with T-wall type floodwalls. The new T-walls would tie into the LPV 109 and LPV 111 levees. The CSX Railroad would remain in service during the floodgate and floodwall construction and no additional rights of way would be required.

There would be no direct or indirect impacts to wetlands from replacing the floodwall and floodgate at LPV 110.

LPV 111

Ground improvement techniques to strengthen the foundation soils would be needed to raise the 5.3 miles of levee to the design elevation by June 2011. The levee would be raised to an elevation that would not settle below a net grade ranging from +25.0 feet NAVD 88 (closest to the CSX Railroad crossing) to +29.0 feet NAVD 88 (closest to the Michoud Canal floodwall) in 10 years. Deep soil mixing, which is a process that modifies the physical and chemical characteristics of the soil without excavating, would be required for this entire reach of levee to improve the foundation soil strength. Deep soil mixing does not require degrading of the levee surface for installation. Shifting of the center of the levee to the protected side as much as 61 feet would be required to allow the wave berm slope to roughly match the flood side slope of the existing levee, thereby reducing the amount of fill added to the flood side slope. After raising the LVP 111 levee to the 100-year elevation, concrete slope protection would be placed from toe-to-toe on both sides of the levee to prevent scouring. Cement for deep soul mixing and slope protection would be delivered to the project area by barge from the GIWW. It is anticipated that the cement would be pumped from barges to the project area.

A new reinforced concrete T-wall would be constructed to replace the existing T-wall at Pump Station No. 15. The T-wall contains three 72-inch discharge pipes that outlet into a discharge basin on the flood side of the T-wall. The top of the protection for the T-wall fronting Pump Station No. 15 would be +34.0 feet NAVD 88 with the adjacent levee tie-in section raised to +32 feet NAVD 88. The new T-wall would transition into levee on both sides. During T-wall demolition, temporary flood risk reduction would be constructed in the discharge basin adjacent to the GIWW. The three 72-inch pipes would be extended through the temporary flood risk reduction to discharge into the GIWW. The temporary flood risk reduction in the discharge basin would also be used as a cofferdam to dewater the discharge basin during T-wall construction. A temporary bridge for access during levee and T-wall construction would be placed across Maxent Canal just north of Pump Station No. 15.

The direct impacts on wetlands from LPV 111 would be 16.0 acres. This includes 10.9 acres of permanent impacts to wetlands on the protected side of the levee and 5.1 acres of permanent impacts to wetlands on the flood side of the levee. Table 1 provides a summary of permanent impacts to waters of the United States from the Lakefront to Michoud Canal Project.

Table 1. Permanent Impacts, Dredge and Fill Summary

LPV	Lake Bottom	Wetlands-Flood Side	Wetlands-Protected Side	Totals
108	7.2	0	0	7.2
109	0	101.0	236.3	337.3
110	0	0	0	0
111	0	5.1	10.9	16.0
Totals	7.2	106.1	247.2	360.5

All impact numbers are acres.

The proposed action itself consists of measures to minimize the adverse effects of storm water erosion and thus requires no separate measures or controls for compliance with CWA Section 402(p) and LAC 33:IX.2341.B.14.j.

Discharges by Others. No discharges are anticipated by others.

Other Information. On August 29, 2005, Hurricane Katrina caused major damage to the Federal and non-Federal flood control and storm damage risk reduction systems in Southeast Louisiana. Hurricane Rita followed this storm on September 24, 2005, and made landfall on the Louisiana-Texas state border, causing damage to the HSDRRS in southern Louisiana. Since the storms, the U.S. Army Corps of Engineers (USACE) has been working with state and local officials to restore the Federal and non-Federal flood control and HSDRRS and related works in the affected area.

To date, approximately 60 percent or less of the New Orleans population has returned to the area. Many residents and businesses are waiting to see positive improvements in the level of risk reduction before returning to the area. A USACE goal of June 2011 has been set for completion of much of the work that will raise the level of risk reduction in the New Orleans area to a new standard and provide a level of security to residents and businesses that will allow and encourage them to return to the area. Federal flood protection eligibility requires a 100-year level of risk reduction.

<u>Properties Adjacent to Disposal Sites.</u> The proposed action is bordered by Lake Pontchartrain, the Norfolk Southern Railroad, Bayou Sauvage National Wildlife Refuge, CSX Railroad, Louisiana Department of Transportation and Development highway rights-of-way, private properties at the highway crossings of LPV 109, and the GIWW.

Status of Other Environmental Documents. Draft IER #7 is currently under public review and was prepared to address the proposed action and alternatives for this reach of the LPV project in accordance with the National Environmental Policy Act (NEPA) of 1969 and the President's Council on Environmental Quality's (CEQ) Regulations (40 CFR §1500-1508), as reflected in the USACE Engineering Regulation, ER 2002-2. The execution of an IER, in lieu of a traditional Environmental Assessment (EA) or Environmental Impact Statement (EIS), is provided for in ER 200-2-2, Environmental Quality (33 CFR §230) Procedures for Implementing the NEPA and pursuant to the CEQ NEPA Implementation Regulations (40 CFR §1506.11).

The Alternative Arrangements can be found at www.nolaenvironmental.gov. The CEMVN implemented Alternative Arrangements on March 13, 2007, in coordination with CEQ. This process was implemented to expeditiously complete environmental analyses for any changes to the authorized system and the 100-year level of the HSDRRS authorized and funded by Congress and the Administration. The proposed actions are located in southeastern Louisiana and are part of the Federal effort to rebuild and complete construction of the HSDRRS in the New Orleans metropolitan area as a result of Hurricanes Katrina and Rita.

Environmental Compliance. Compliance for the proposed action would be achieved upon:

- Coordination of this Individual Environmental Report and with appropriate agencies, organizations, and individuals for their review and comments
- U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) confirmation that the proposed action would not be likely to adversely affect any endangered or threatened species

- Louisiana Department of Natural Resources concurrence with the determination that the proposed action is consistent, to the maximum extent practicable, with the Louisiana Coastal Resources Program
- Receipt of a Water Quality Certificate from the State of Louisiana
- Public review of the Section 404(b)(1) Public Notice
- Signature of the Section 404(b)(1) Evaluation
- Receipt of the Louisiana State Historic Preservation Officer Determination of No Affect on cultural resources
- Receipt and acceptance or resolution of all USFWS Fish and Wildlife Coordination Act recommendations
- Receipt and acceptance or resolution of all Louisiana Department of Environmental Quality comments on the air quality impact analysis documented in the IER
- Receipt and acceptance or resolution of all NMFS Essential Fish Habitat recommendations

The Decision Record would not be signed until the proposed action achieves environmental compliance with applicable laws and regulations, as described above.

<u>Coordination</u>. The following is a partial list of agencies to which a copy of this notice is being sent:

U.S. Environmental Protection Agency, Region VI

U.S. Department of the Interior, Fish and Wildlife Service

U.S. Department of Commerce, NOAA, National Marine Fisheries Service

U.S. Coast Guard, Eighth District

Louisiana Department of Environmental Quality

Louisiana Department of Natural Resources

Louisiana Department of Wildlife and Fisheries

Louisiana Department of Transportation and Development

Louisiana State Historic Preservation Officer

Governor's Executive Assistant for Coastal Activities

This notice is being distributed to these and other appropriate Congressional, Federal, state, and local interests, environmental organizations, and other interested parties.

<u>Evaluation Factors</u>. Evaluation includes application of the Section 404(b)(1) guidelines promulgated by the Administrator of the U.S. Environmental Protection Agency, through 40 CFR 230.

Public Involvement. Extensive public involvement has been sought on the proposed action. The LPV projects analyzed in IER #7 were publicly disclosed and described in the Federal Register on March 13, 2007 and on the website, www.nolaenvironmental.gov. Scoping for IER #7 was initiated on March 12, 2007 through advertisements and public notices placed in USA Today and The New Orleans Times Picayune. Nine public scoping meetings were held throughout the New Orleans metropolitan area between March 27 and April 12, 2007. Public meetings have continued to be held in the metropolitan area to keep stakeholders advised of the project's status.

Interested parties may express their views on the disposal of material associated with the proposed action or suggest modifications. All comments postmarked on or before the expiration of the comment period for this notice will be considered.

Any person who has an interest that may be affected by deposition of excavated or dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within the comment period of this notice and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by the proposed action.

You are requested to communicate the information contained in this notice to any parties who may have an interest in the proposed action.

For further information regarding the proposed action, please contact Mr. Gib A. Owen at (504) 862-1337. Mr. Owen's FAX number is (504) 862-2088 and his E-mail address is Gib.A.Owen@usace.army.mil.

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COMMENT PERIOD FOR THIS PUBLIC NOTICE EXPIRES: 4 June 2009